UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to:
OSB2000-0302-FEC

May 18, 2001

Mr. Fred P. Patron
Senior Transportation Planning Engineer
Federal Highway Administration, Oregon Division
530 Center Street NE
Salem, OR 97301

Re: Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Act Essential Fish Habitat Consultation for Clapshaw Hill Road/Gales Creek Bridge Replacement Project, Washington County, Oregon

Dear Mr. Patron:

Enclosed is the National Marine Fisheries Service's (NMFS) biological opinion (Opinion) for the Clapshaw Hill Road/Gales Creek Bridge replacement project in Washington County, Oregon. The Federal Highway Administration (FHWA) proposes to replace the obsolete Clapshaw Hill Road bridge over Gales Creek, a tributary of the Tualatin River, with a wider, safer structure. FHWA is the lead Federal agency and proposes this project in cooperation with the Oregon Department of Transportation and Washington County Department of Land Use and Transportation. FHWA requested formal consultation, pursuant to section 7 of the Endangered Species Act (ESA), in a letter dated March 1, 2001. NMFS received the request for consultation on March 5, 2001.

This Opinion considers the potential effects of the proposed action on Upper Willamette River (UWR) steelhead (*Oncorhynchus mykiss)* which occur in the proposed project area. UWR steelhead were listed as threatened under the ESA on March 25, 1999 (64 FR 14517), critical habitat was designated on February 16, 2000 (65 FR 7764), and protective regulations were issued on July 10, 2000 (65 FR 42422). NMFS concludes that the proposed action is not likely to jeopardize the subject species, or destroy or adversely modify critical habitat. Included in the enclosed opinion is an incidental take statement with terms and conditions to minimize the take of the subject species.

In addition, this document also serves as consultation on Essential Fish Habitat (EFH) under Public Law 104-267, the Sustainable Fisheries Act of 1996, as it amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act). An EFH analysis is required for coho salmon (*Oncorhynchus kisutch)* and chinook salmon (*Oncorhynchus*

tshawytscha).

If you have any questions regarding this letter, please contact Art Martin of my staff in the Oregon State Branch Office at (503) 231-6848.

Sincerely,

Michael R Crouse

Donna Darm
Acting Regional Administrator

cc: Rose Owens - ODOT
Greg Apke - ODOT
Julie Bunnell - ODOT
Richard Beck, ODOT
Ray Bosch, USFWS
Greg White, CH2MHill

Endangered Species Act - Section 7 Consultation
&
Magnuson-Stevens Act
Essential Fish Habitat Consultation

BIOLOGICAL OPINION

Clapshaw Hill Road/Gales Creek Bridge Replacement Project, Washington County, Oregon

Agency: Federal Highway Administration

Consultation Conducted By: National Marine Fisheries Service,
Northwest Region

Date Issued: May 18, 2001

Refer to: OSB2000-0302-FEC

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1. ENDANGERED SPECIES ACT

1.1 Background

On November 28, 2000, the National Marine Fisheries Service (NMFS) received a Biological Assessment (BA) and a request from the Federal Highway Administration (FHWA) for Endangered Species Act (ESA) section 7 informal consultation for the Clapshaw Hill Road/Gales Creek Bridge Replacement project. As a result of discussions between the NMFS and the action agency, on March 5, 2001, NMFS received an amended BA dated February 23, 2001. The project will replace the current, functionally obsolete Clapshaw Hill Road bridge over Gales Creek, with a new, wider and safer structure. Clapshaw Hill Road is located west of Banks, Washington County, Oregon. The project applicant is Washington County (County). The County designed the project and will administer the construction contract. This biological opinion (Opinion) is based on the information presented in the amended BA and the result of the consultation process.

The FHWA has determined that Upper Willamette River(UWR) steelhead (*Oncorhynchus mykiss*) may occur within the project area. The UW steelhead were listed by the National Marine Fisheries Service (NMFS) as threatened under the Endangered Species Act (ESA) on March 25, 1999 (64 FR 14517). NMFS designated critical habitat for this species on February 16, 2000 (65 FR 7764) and protective regulations were issued on July 10, 2000 (65 FR 42422). Critical habitat includes all river reaches and estuarine areas accessible to listed steelhead from the mouth of the Columbia River upstream to and including the Upper Willamette River Basin. The FHWA, using methods described in *Making ESA Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996), determined that the proposed action is likely to adversely affect UWR steelhead.

This Opinion is based on the information presented in the amended BA and developed through site visits, correspondence and meetings to obtain additional information and clarify the amended BA. The objective of this Opinion is to determine whether the actions to demolish and remove the existing structure and construct a new structure are likely to jeopardize the continued existence of the UWR steelhead, or destroy or adversely modify critical habitat. This consultation is undertaken under section 7(a)(2) of the ESA, and its implementing regulations, 50 CFR Part 402.

1.2 Proposed Action

This project is designed to replace the Clapshaw Hill Road Bridge over Gales Creek near Banks, Oregon. During the 1996 floods, 70% of one of the center piers was severely scoured. Although temporary emergency repairs were undertaken, the bridge remains both structurally insufficient and functionally obsolete.

The existing 33.5m long, 5.9m wide bridge will be replaced with a new, structure that is 35.1m long and 9.6 m wide along the same basic alignment. No temporary detour or work bridges will be need to complete construction. During the construction process, the two existing center piers will be removed. At least one of the piers is likely to be in the flowing channel during removal and will require work isolation and potential fish salvage activities. A toe trench will then be excavated along the west bank and filled with large boulders to provide scour protection to the west bent within the isolated work area. Of the estimated 482 cubic meters of excavation and 612 cubic meters of fill within critical habitat, 306 cubic meters of excavation and 199 cubic meters of fill will occur below the ordinary high water mark (OHWM) resulting in net decrease of fill below the OHWM. The additional fill above the OHWM will be used to widen and raise the existing west roadbed approach. As a result of construction, an existing big-leaf maple will be removed and placed into the stream channel to enhance in-stream habitat complexity.

All in-water work activities will occur during the standard in-water work timing guideline of July1 through September 30 and any exceptions to the standard in-water work timing would be granted by NMFS only after consultation with the ODFW district biologist and the ODFW habitat biologist.

1.3 Biological Information and Critical Habitat

Within the Gales Creek watershed the National Marine Fisheries Service (NMFS) has listed UWR steelhead March 25, 1999 (64 FR 14517) as threatened under the Endangered Species Act. Protective regulations were adopted under section 4(d) of the ESA on July 10, 2000 (65 FR 42422). NMFS designated critical habitat for this species on February 16, 2000 (65 FR 7764). The designation includes all waterways, substrates, and adjacent riparian zones below longstanding, naturally impassable barriers. The adjacent riparian zone is defined based on key riparian functions. These functions are the area adjacent to a stream that provide shade, sediment, nutrient/chemical regulation, streambank stability, and input of large woody debris/organic matter.

Adult steelhead are likely to migrate into or through the project area between January and April. Spawning will likely begin towards the later end of migration but could occur as late as May. Most fry should emerge and become free swimming prior to the beginning of the standard in-water work timing of July 1. Juvenile steelhead remain in fresh water as long as two years and could be present year round at the project site as water quality allows.

1.4 Evaluating Proposed Actions

The standards for determining jeopardy are set forth in section 7(a)(2) of the ESA as defined by 50 CFR Part 402 (the consultation regulations). NMFS must determine whether the action is likely to jeopardize the listed species and/or whether the action is likely to destroy or adversely modify critical habitat. This analysis involves the: (1) Definition of the biological requirements

and current status of the listed species; and (2) evaluation of the relevance of the environmental baseline to the species' current status.

Subsequently, NMFS evaluates whether the action is likely to jeopardize the listed species by determining if the species can be expected to survive with an adequate potential for recovery. In making this determination, NMFS must consider the estimated level of mortality attributable to: (1) Collective effects of the proposed or continuing action; (2) the environmental baseline; and (3) any cumulative effects. This evaluation must take into account measures for survival and recovery specific to the listed salmonid's life stages that occur beyond the action area. If NMFS finds that the action is likely to jeopardize the listed species, NMFS must identify reasonable and prudent alternatives for the action.

Furthermore, NMFS evaluates whether the action, directly or indirectly, is likely to destroy or adversely modify the listed species' designated critical habitat. The NMFS must determine whether habitat modifications appreciably diminish the value of critical habitat for both survival and recovery of the listed species. The NMFS identifies those effects of the action that impair the function of any essential element of critical habitat. The NMFS then considers whether such impairment appreciably diminishes the habitat's value for the species' survival and recovery. If NMFS concludes that the action will destroy or adversely modify critical habitat, it must identify any reasonable and prudent alternatives available.

For the proposed action, NMFS' jeopardy analysis considers direct or indirect mortality of fish attributable to the action. NMFS' critical habitat analysis considers the extent to which the proposed action impairs the function of essential biological elements necessary for juvenile and adult migration, and juvenile rearing of UWR steelhead.

1.4.1 Biological Requirements

The first step in the methods NMFS uses for applying the ESA section 7(a)(2) to listed steelhead is to define the species' biological requirements that are most relevant to each consultation. NMFS also considers the current status of the listed species taking into account population size, trends, distribution and genetic diversity. To assess the current status of the listed species, NMFS starts with the determinations made in its decision to list UWR steelhead for ESA protection and also considers new available data that is relevant to the determination (Busby et al. 1996).

The relevant biological requirements are those necessary for UWR steelhead to survive and recover to naturally reproducing population levels at which protection under the ESA would become unnecessary. Adequate population levels must safeguard the genetic diversity of the listed stock, enhance their capacity to adapt to various environmental conditions, and allow them to become self-sustaining in the natural environmental.

For this consultation, the biological requirements are improved habitat characteristics that function to support successful migration, spawning, holding, and rearing. The current status of the UWR steelhead, based upon their risk of extinction, has not significantly improved since the species was listed. Although escapement of wild winter steelhead over Willamette Falls into the Upper Willamette Basin have slightly increased in 2000 and 2001, the longer term trend is a decline over time. Specific escapement goals for Gales Creek have not been set and specific escapement monitoring has not been measured for Gales Creek.

1.4.2 Environmental Baseline

The current range-wide status of the identified ESU may be found in Busby et al. (1996). The identified action will occur within the range of UWR steelhead. The action area is defined as the area that is directly and indirectly affected by the action. The direct effects occur at the project site and may extend upstream or downstream based on the potential for impairing fish passage, hydraulics, sediment and pollutant discharge, and the extent of riparian habitat modifications. Indirect effects may occur throughout the watershed where actions described in this Opinion lead to additional activities or affect ecological functions contributing to stream degradation. As such, the action area for the proposed activities include the immediate watershed where the bridge replacement will occur, and those areas upstream and downstream that may reasonably be affected, temporarily or in the long term. For the purposes of this Opinion, the action area is defined as the streambed and streambank of Gales Creek extending upstream and downstream to the edges of disturbance. Other areas of the Gales Creek watershed are not expected to be directly impacted. There will be temporary indirect impacts (temperature modification and sedimentation) to Gales Creek caused by the in-water work and general riparian and bank disturbance within the project area.

The dominant land uses in the Gales Creek Watershed are agriculture and forestry. Various water quality monitoring within Gales Creek has occurred and indicates degraded water quality with regard to temperatures and suspended solids within the project vicinity. The upper Gales Creek basin is assumed to have better water quality more suitable for year-round rearing of juvenile salmonids.

Based on the best available information regarding the current status of UWR steelhead range-wide; the population status, trends, and genetics; and the poor environmental baseline conditions within the action area; NMFS concludes that the biological requirements of UWR steelhead within the action area are not currently being met. Gales Creek has degraded habitat resulting from agriculture practices, draining and filling of wetlands, forestry practices, road building, and residential construction. The large woody debris, off-channel areas, pool frequency, pool quality and refugia habitat indicators are not properly functioning within the action area because of the chronic habitat degradation influences of altered hydrology, changes in land use and development within the basin. In addition, the following environmental baseline indicators are also not functioning properly or at risk: chemical contamination/nutrients, physical barriers, substrate, streambank condition, width/depth ratio, floodplain connectivity, change in peak/base

flows, increase in drainage network, road density and location, disturbance history and riparian reserves. Actions that do not maintain or restore properly functioning aquatic habitat conditions would be likely to jeopardize the continued existence of UWR steelhead.

1.5 Analysis of Effects

1.5.1 Effects of Proposed Action

The effects determination in this Opinion was made using a method for evaluating current aquatic conditions, the environmental baseline, and predicting effects of actions on them. This process is described in the document *Making ESA Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996). The effects of actions are expressed in terms of the expected effect – restore, maintain, or degrade – on aquatic habitat factors in the project area.

The proposed action has the potential to cause the following impacts to UWR steelhead:

1. Fish will benefit from improved hydraulic conditions at the project site as a result of the removal of two center piers from within the 2-year floodplain. Additionally, a net decrease in the amount of fill material within the 2-year floodplain coupled with revegetation efforts will improve streambank condition. Improved stream bank conditions should benefit water quality and in-stream habitat complexity in the future.

2. Fish will benefit from improved treatment of runoff water coming off the bridge and approaches. The increase in impervious surface to a total of 284 square meters will be offset by the construction of a biofiltration swale which will treat the equivalent of 630 square meters of impervious surface. The biofiltration swale will be designed and constructed to meet United Sewerage Agency criteria of a nine minute minimum hydraulic residence time. This is better than the current situation, in which all precipitation draining off the bridge and approaches goes directly into roadside ditches and Gales Creek with no treatment. The net effect will be to improve conditions in the long term for UWR steelhead found within the vicinity of the project area and in Gales Creek.

3. During the period of construction, turbidity and sedimentation will impact fish in Gales Creek. Any in-water work has the potential to increase erosion from the streambank, and turbidity in the creek. Turbidity, at moderate levels, has the potential to adversely affect primary and secondary productivity, and at high levels, has the potential to injure and kill adult and juvenile fish, and may also interfere with feeding (Spence *et al.* 1996). Behavioral effects on fish, such as gill flaring and feeding changes, have been observed in response to pulses of suspended sediment. Localized increases of erosion/turbidity during in-water work could displace fish in the project area and disrupt normal behavior. These effects are expected to be temporary or non-existent and localized, depending on

occupancy during construction (occurring during work isolation, fish salvage, toe trench excavation, riprap placement, grading, and tree removal, and lasting until these areas of bare soil are stabilized).

The negative effects of these activities on UWR steelhead and aquatic habitat will be kept to a minimum by implementing construction methods and approaches, included in the project design, that are intended to avoid or minimize impacts. These include:

1. All in-water work will be done during the low-water season between July 1 and September 30. Exceptions to this work timing will be carried out only after consultation by NMFS with the ODFW district biologist.

2. A coffer dam will be constructed to isolate the work area from the flowing channel during pier removal, toe trench excavation and placement of riprap within the actively flowing channel to minimize temporary construction impacts.

3. Fish salvage will occur from within the isolated work area if listed salmonids are found to be present during construction.

1.5.2 Effects on Critical Habitat

NMFS designates critical habitat based on physical and biological features that are essential to the listed species. Essential features for designated critical habitat include substrate, water quality, water quantity, water temperature, food, riparian vegetation, access, water velocity, space and safe passage. Critical habitat for UWR steelhead consists of all waterways below naturally impassable barriers including the project area. The adjacent riparian zone is also included in the designation. This zone is defined as the area that provides the following functions: Shade, sediment, nutrient or chemical regulation, streambank stability, and input of large woody debris or organic matter.

The proposed actions will affect critical habitat. In the short term, a temporary increase of sediments and turbidity and disturbance of riparian habitat is expected. The pollutants that currently flow from the bridge and approaches during precipitation will be treated. The NMFS does not expect that these actions will diminish the value of the habitat for survival of UWR steelhead.

1.5.3 Cumulative Effects

Cumulative effects are defined in 50 CFR 402.02 as "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." The action area has been defined as upstream to the edge of disturbance extending downstream the edge of disturbance on Gales Creek. A

wide variety of actions occur within the Gales Creek watershed, within which the action area is located.

NMFS is not aware of any other significant change in such non-Federal activities that are reasonably certain to occur. NMFS assumes that future private and State actions will continue at similar intensities as in recent years. NMFS assumes that future FHWA transportation projects, if planned in the Gales Creek watershed, will be reviewed through separate section 7 consultation processes and therefore are not considered cumulative effects.

1.6 Conclusion

After reviewing the current status of UWR steelhead, the environmental baseline for the action area, the effects of the proposed Clapshaw Hill Road/Gales Creek Bridge Replacement, and the cumulative effects, it is the NMFS Opinion that this project, as proposed, is not likely to jeopardize the continued existence of the UWR steelhead, and is not likely to destroy or adversely modify designated critical habitat. NMFS applied its evaluation methodology (NMFS 1996) to the proposed action and found that it would cause minor, short-term adverse degradation of anadromous salmonid habitat due to sediment/turbidity impacts, temperature modification, and habitat loss. At the same time, there will be long term benefits to UWR steelhead due to improved hydraulic function, water quality treatment and placement of large woody debris and fish boulder clusters to increase habitat complexity. This conclusion is based on findings that the proposed action will minimize death or injury to UWR steelhead by limiting the amount of riparian vegetation that is removed, restoring creek banks, treating stormwater runoff, isolating the work area within the actively flowing channel, salvaging listed juvenile salmonids present within the isolated work area and improving in-stream habitat complexity.

The bank stabilization and planting activities will increase the likelihood of a return to riparian function at the site. The disturbed riparian area is within the critical habitat for UW steelhead. It will take at least five years of vegetation growth before function begins to return. The benefits of the water treatment facility and removal of the two center piers from the 2-year floodplain should show improvements to water quality and hydraulic function, respectively, shortly after construction is complete, no later than the year following the completion of the bridge replacement. The effect of these actions will be to maintain or improve properly functioning aquatic habitat in the long term.

1.7 Reinitiation of Consultation

This concludes formal consultation on the Clapshaw Hill Road/Gales Creek Bridge Replacement project. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained or is authorized by law and if: 1) The amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion; 3) the agency action is subsequently

modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or 4) a new species is listed or critical habitat is designated that may be affected by the action. In instances where the amount or extent of authorized incidental take is exceeded, any operations causing such take must cease pending reinitiation of consultation.

2. INCIDENTAL TAKE STATEMENT

Sections 4 (d) and 9 of the ESA prohibit any taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct) of listed species without a specific permit or exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, and sheltering. Harass is defined as actions that create the likelihood of injuring listed species to such an extent as to significantly alter normal behavior patterns which include, but are not limited to, breeding, feeding, and sheltering. Incidental take is take of listed animal species that results from, but is not the purpose of, the Federal agency or the applicant carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

An incidental take statement specifies the impact of any incidental taking of endangered or threatened species. It also provides reasonable and prudent measures that are necessary to minimize impacts and sets forth terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.

2.1 Amount or Extent of the Take

The NMFS anticipates that the action covered by this Opinion has more than a negligible likelihood of resulting in incidental take of UWR steelhead because of detrimental effects from sediment pulses and increased temperature levels (non-lethal) and the slight possibility of juvenile steelhead presence in the vicinity of the project site during in-water work. Effects such as temporarily elevated temperatures are largely unquantifiable in the short-term, and are not expected to be measurable as long-term harm to steelhead behavior or population levels. NMFS expects the possibility exists for handling of juvenile steelhead during the work isolation process resulting in incidental take to individuals if adequate water quality persists during the construction period. NMFS anticipates that incidental take of up to 50 juvenile UWR steelhead could occur as a result of the actions covered by this Opinion. The extent of the take is limited to UWR steelhead in Gales Creek and to associated riparian habitat in the project area. The action area is defined as along the streambed and streambank of Gales Creek, extending upstream to the edge of disturbance, and extending downstream to the edge of disturbance along Gales Creek.

2.2 Reasonable and Prudent Measures

The measures described below are non-discretionary. They must be implemented so that they become binding conditions in order for the exemption in section 7(a)(2) to apply. The FHWA has the continuing duty to regulate the activities covered in this incidental take statement. If the FHWA fails to require the County to adhere to the terms and conditions of the incidental take statement through enforceable terms added to the document authorizing this action, or fails to retain the oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

The Clapshaw Road/Gales Creek Bridge replacement project includes a set of best management practices (BMPs) designed to minimize take of listed species. These BMPs are described on pages 22-26 of the amended BA for this project, dated February 23, 2001. Specific BMPs for in-water and bank work, clearing and grubbing, bridge removal, erosion control, hazardous materials, and site-specific conservation and habitat remediation measures are included. The NMFS regards these BMPs as integral components of the Clapshaw Road/Gales Creek Bridge replacement project and considers them part of the action. The NMFS concludes that the proposed project carried out consistent with these BMPs and the reasonable and prudent measures below, does not require further consultation. However, if the action is carried out differently than is specified in these BMPs and RPMs, further consultation will be necessary.

The NMFS believes that the following reasonable and prudent measures are necessary and appropriate to minimize the likelihood of take of listed fish resulting from implementation of this opinion. These reasonable and prudent measures would also minimize adverse effects to designated critical habitat.

The FHWA shall:

1. Minimize the likelihood of incidental take by timing the completion of all in-water work as necessary to avoid harming vulnerable salmon life stages, including spawning, migration and rearing.

2. Minimize the likelihood of incidental take from in-water work by ensuring that the in-water work area is isolated from flowing water.

3. Carry out a comprehensive monitoring and reporting program to ensure this Opinion is meeting its objective of minimizing the likelihood of take from permitted activities.

2.3 Terms and Conditions

To be exempt from the prohibitions of section 9 of the ESA, the FHWA must comply with the following terms and conditions, which implement the reasonable and prudent measures described above for each category of activity. These terms and conditions are non-discretionary.

1. To implement Reasonable and Prudent Measure #1 (in-water timing) above, the FHWA shall ensure that:

   a. All work within the active channel that could potentially contribute sediment or toxicants to downstream fish-bearing systems will be completed within the ODFW approved in-water work period.[1]

   b. Extensions of the in-water work period, including those for work outside the wetted perimeter of the stream but below the ordinary high water mark must be approved by biologists from NMFS.

2. To implement Reasonable and Prudent Measure #2 (isolation of in-water work area) the FHWA shall ensure that during pier removal, toe trench excavation and placement of riprap, the work area is well isolated from the active flowing stream within a coffer dam (made out of sandbags, sheet pilings, inflatable bags, or etc.), or similar structure, to minimize the potential for sediment entrainment.

   a. Seine and release. Before and intermittently during pumping, attempts will be made to seine and release fish from the work isolation area as is prudent to minimize risk of injury.

      i. Seining will be conducted by, or under the supervision of a fishery biologist experienced in such efforts. Staff working with the seining operation must have the necessary knowledge, skills, and abilities to ensure the safe handling of all ESA-listed fish.

      ii. ESA-listed fish must be handled with extreme care and kept in water to the maximum extent possible during seining and transfer procedures. The transfer of ESA-listed fish must be conducted using a sanctuary net that holds water during transfer, whenever necessary to prevent the added stress of an out-of-water transfer.

      iii. Seined fish must be released as near as possible to capture sites.

      iv. If a dead, injured, or sick listed species specimen is found, initial notification must be made to the National Marine Fisheries Service Law Enforcement Office, in the Vancouver Field Office, 600 Maritime, Suite 130, Vancouver, Washington 98661; phone: 360/418-4246. Care should be taken in handling sick or injured specimens to ensure effective

[1] Oregon Department of Fish and Wildlife, *Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources*, 12 pp (June 2000)(identifying work periods with the least impact on fish)(http://www.dfw.state.or.us/ODFWhtml/InfoCntrHbt/0600_inwtrguide.pdf).

treatment and care. Dead specimens should be handled so as to preserve biological material in the best possible state for later analysis of cause of death. With the care of sick or injured listed species or preservation of biological materials from a dead animal, the finder has the responsibility to carry out instructions provided by Law Enforcement to ensure that evidence intrinsic to the specimen is not disturbed.

v. The transfer of any ESA-listed fish from the County to third parties other than NMFS personnel requires written approval from the NMFS.

vi. The County must obtain any other Federal, state, and local permits and authorizations necessary for the conduct of the seining activities.

vii. The County must allow the NMFS or its designated representative to accompany field personnel during the seining activity, and allow such representative to inspect the County's seining records and facilities.

viii. A description of any seine and release effort will be included in a post project report, including the name and address of the supervisory fish biologist, methods used to isolate the work area and minimize disturbances to ESA-listed species, stream conditions before and following placement and removal of barriers; the means of fish removal; the number of fish removed by species; the condition of all fish released, and any incidence of observed injury or mortality.

ix. Water pumped from the work isolation area will be discharged into an upland area providing over-ground flow before returning to the creek. Discharge will occur so that it does not cause erosion.

x. Discharges into potential fish spawning areas or areas with submerged vegetation are prohibited.

3. To implement Reasonable and Prudent Measure #3 (monitoring and reporting), above, the FHWA shall ensure that:

a. Within 30 days of completing the project, the County will submit a monitoring report to NMFS describing the County's success meeting their permit conditions. This report will consist of the following information.

i. Project identification.

(1) Project name;

(2) starting and ending dates of work completed for this project; and

(3) the FHWA contact person.

(4) monitoring reports shall be submitted to:

National Marine Fisheries Service
Oregon State Branch, Habitat Conservation Division
Attn: OSB2000-0302-FEC
525 NE Oregon Street, Suite 500
Portland, Oregon 97232-2778

ii. Isolation of in-water work area. A report of any seine and release activity including:

(1) The name and address of the supervisory fish biologist;

(2) methods used to isolate the work area and minimize disturbances to ESA-listed species;

(3) stream conditions before and following placement and removal of barriers;

(4) the means of fish removal;

(5) the number of fish removed by species;

(6) the location and condition of all fish released; and

(7) any incidence of observed injury or mortality.

iii. Pollution and erosion control. Copies of all pollution and erosion control inspection reports, including descriptions of any failures experienced with erosion control measures, efforts made to correct them and a description of any accidental spills of hazardous materials.

iv. Site restoration. Documentation of the following conditions:

(1) Finished grade slopes and elevations.

(2) Log and rock structure elevations, orientation, and anchoring, if any.

(3) Planting composition and density.

(4) A plan to inspect and, if necessary, replace failed plantings and structures for five years.

v. A narrative assessment of the project's effects on natural stream function.

vi. Photographic documentation of environmental conditions at the project site and compensatory mitigation site(s) (if any) before, during and after project completion.

(1) Photographs will include general project location views and close-ups showing details of the project area and project, including pre and post construction.

(2) Each photograph will be labeled with the date, time, photo point, project name, the name of the photographer, and a comment describing the photograph's subject.

(3) Relevant habitat conditions include characteristics of channels, streambanks, riparian vegetation, flows, water quality, and other visually discernable environmental conditions at the project area, and upstream and downstream of the project.

3. ESSENTIAL FISH HABITAT

Public Law 104-267, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Act to establish new requirements for "Essential Fish Habitat" (EFH) descriptions in Federal fishery management plans and to require Federal agencies to consult with NMFS on activities that may adversely affect EFH, defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. The Pacific Fisheries Management Council (PFMC) has designated EFH for federally-managed groundfish (PFMC 1998a), coastal pelagics (PFMC 1998b) and Pacific salmon fisheries (PFMC 1999). EFH includes those waters and substrate necessary to ensure the production needed to support a long-term sustainable fishery (*i.e.*, properly functioning habitat conditions necessary for the long-term survival of the species through the full range of environmental variation).

The Magnuson-Stevens Act requires consultation for all actions that may adversely affect EFH, and it does not distinguish between actions in EFH and actions outside EFH. Any reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside EFH, such as upstream and upslope activities that may have an adverse effect on EFH.

Therefore, EFH consultation with NMFS is required of Federal agencies undertaking, permitting or funding activities that may adversely affect EFH, regardless of their location.

The consultation requirements of section 305(b) of the Magnuson-Stevens Act (16 U.S.C. 1855(b)) provide that:

- Federal agencies must consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH;
- NMFS shall provide conservation recommendations for any Federal or State activity that may adversely affect EFH;
- Federal agencies shall within 30 days after receiving conservation recommendations from NMFS, provide a detailed response in writing to NMFS regarding the conservation recommendations. The response shall include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the conservation recommendations of NMFS, the federal agency shall explain its reasons for not following the recommendations.

3.1 Identification of Essential Fish Habitat

The Columbia River estuary and the Pacific Ocean off the mouth of the Columbia River are designated as EFH for groundfish and coastal pelagic species (PFMC 1998a and PFMC 1998b). The marine extent of groundfish and coastal pelagic EFH includes those waters from the nearshore and tidal submerged environments within Washington, Oregon, and California state territorial waters out to the exclusive economic zone (200 miles) offshore between the Canadian border to the north and the Mexican border to the south.

The designated salmon fishery EFH includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except above the impassable barriers identified by PFMC (PFMC 1999). Chief Joseph Dam, Dworshak Dam, and the Hells Canyon Complex (Hells Canyon, Oxbow, and Brownlee Dams) are among the listed man-made barriers that represent the upstream extent of the Pacific salmon fishery EFH. Salmon EFH excludes areas upstream of longstanding naturally impassable barriers (i.e., natural waterfalls in existence for several hundred years). In the estuarine and marine areas, designated salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception to the Canadian border (PFMC 1999). The proposed action area encompasses the Council-designated EFH for chinook salmon (*Onchorhynchus tshawytscha*) and for coho salmon (*Onchorhynchus kisutch*).

3.2 Proposed Action

The proposed action is detailed above, in section 1 of this Opinion. The proposed action area includes Gales Creek extending upstream and downstream to the edges of disturbance. The proposed action area encompasses the Council-designated EFH for chinook and coho salmon. A description and identification of EFH for salmon is found in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (PFMC 1999). Assessment of the impacts to these species' EFH from the above proposed FHWA action is based on this information.

The objective of this EFH consultation is to determine whether the proposed action may adversely affect EFH for the species listed above. Another objective of this EFH consultation is to recommend conservation measures to avoid, minimize, or otherwise offset potential adverse impacts to EFH resulting from the proposed action.

3.3 Effects of the Proposed Action

NMFS expects that the effects of this project on chinook and coho salmon EFH are likely to be within the range of effects to listed UW steelhead considered in the ESA portion of this consultation. Based on that analysis, NMFS finds that the proposed project is likely to adversely affect EFH for coho and chinook salmon.

3.4 Conservation Recommendations

The FHWA have provided for minimization of the potential effects to EFH in the proposed project design. The reasonable and prudent measures and the terms and conditions outline above in section 2 are applicable to designated EFH, and they constitute NMFS EFH conservation recommendations. If the FHWA implements these recommendations, potential adverse effects to EFH will be minimized.

3.5 Consultation Renewal

The FHWA must reinitiate EFH consultation with NMFS if the action is substantially revised in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR Section 600.920[k]).

4. LITERATURE CITED

Section 7(a)(2) of the ESA requires biological opinions to be based on "the best scientific and commercial data available." This section identifies the data used in developing this Opinion.

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